THE CONTENTS OF THIS SECTION ARE
THE HIGHEST QUALITY AVAILABLE

INITIAL KH DATE 4-25-03

Appendix F

Environmental Checklist

ENVIRONMENTAL CHECKLIST

EC Document No. PBF-00-002

DIRECTIONS: The Responsible Manager should complete Sections A through D. The Contractor's Policy and Permitting Organization completes Sections E & F. Refer to MCP-3480 "Environmental Instructions for Facilities, Processes, Materials, and Equipment," Appendix A for instructions to complete this form.

SECTION A. Descriptive Information:

Charge Number:	3XBC31704		
Project Title:	WAG 5 Comprehensive Remedial Action		
DOE-HQ Program:	EM-40	Project No.:	
Performing Organization:	BBWI WAG-5-31B0	Date:	3/01/2000

Contact	Name	Telephone No.	E-Mail
DOE Project Technical Manager:	A. Hathaway	526-4049	HATHAWCA
Facility Operations Manager:	G. W. Braun	526-2729	BRN
Program/Project Manager:	F. L. Webber	526-8507	FLW
Project/Technical Contact:	C. M. Hiaring	526-2719	HRG
Alternative Project/Technical Contact:	D. H. Preussner	526-9813	DPRES
Environmental Field Support Contact	K. M. Davis	526-4949	DAVIKM

SECTION B. Project Description: Attach a complete and concise description of the project or activity. Including type of activity (e.g., new construction, process modification, maintenance, research and development, or work for others), location (e.g., area, building, laboratory), purpose and need, project start and end dates, approximate cost.

SECTION C. Environmental Aspects / Potential Sources of Impact: Would the action involve, generate, or result in changes to any of the following? (If Yes, on attachment provide specific potential impact information such as types and amounts of chemicals, waste, effluent, or emissions; size of modification, soil disturbance; or type of tank, equipment, process, or pollution prevention measures).

Source	Yes	No	Source	Yes	No
1. Air Pollutants	X		11. Industrial Waste Generation	X	
2. Asbestos Emissions		X	12. Interaction with Wildlife/Habitat	X	
3. Biological Hazards		X	13. Managing Surplus Property and Materials		X
4. Chemical Use and Storage	X		14. PCB Contamination		X
5. Contaminated Sites Disturbance	X		15. Radioactive Waste Generation	X	
6. Cultural/Historical Resource Disturbance	X		16. Storing Hazardous Materials or Waste in Tanks		X
7. Discharge to Wastewater Systems or Groundwater		X	17. Surface Water Contamination		X
8. Drinking Water Contamination		X	18. Use of Natural Resources		X
9. Hazardous/Mixed Waste Generation		X	19. Work within a Flood Plain		X
10. Hazardous/Radioactive Material or Waste Handling and Trans.	X		20. Other:		X

SECTION D. Work Activities: Select specific work activities using Appendix B in MCP-3480 and check appropriate section numbers on the Work Activity Work Sheet (see next page). Check and do one of the following:

X	If required to submit EC by MCP-3480, Appendix B, do not complete Sections E & F or Signature Block. Submit EC to Air / Water / NEPA / Environmental Programs Policy and Permitting Department, John S. Irving (MS 3428) or E-Mail (JSI4) for review and approval.
	If not required to submit EC by MCP-3480, Appendix B, complete Section F (check either "Existing EC" or "Does not require an approved EC"), sign & date (in Signature Block), and place copy of EC in project files.

SECTION E. Instructions and Conditions: (If Yes, see attachment for instructions.)	Yes	No
1. Instructions from MCP-3480?	X	
2. Conditions Required Before Starting Project?		X

SECTION F. NEPA Level of Documentation and Reference(s).

CX:		EA:		EIS:		CERCLA:	X	Previously approved NEPA document, including existing environmental checklist (provide # below):		Does not require EC approved by Environmental Affairs (e.g., routine maintenance, operational activities):	

Reference(s): In accordance with the June 1994 Secretarial Policy on the National Environmental Policy Act, the Department of Energy will rely on the CERCLA process for review of actions to be taken under CERCLA

Note: For projects checked above as "CX" (Categorical Exclusion) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor " related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

Note: The above paragraph does not apply to EA, EIS, or CERCLA related activities.

SIGNATURE BLOCK.

Name: Reed S. Moser Telephone No.: 526-7811

Signature: Reed S. Moser Date: 01/06/01

The Environmental Instructions in this EC are effective for one year from the date in the Signature Block (page 1) or unless otherwise notified by EA. There is no expiration date for the Categorical Exclusion listed in Section F unless noted.

ENVIRONMENTAL CHECKLIST

EC Document No. PBF-00-002

Asbestos
- [ ] 4.2 Training Personnel to Handle Asbestos
- [ ] 4.3 Performing Activities That May Disturb or Block Access to Asbestos
- [ ] 4.4 Removing Asbestos

Chemicals
- [X] 4.5 Purchasing Chemicals
- [X] 4.6 Using & Storing Chemicals

Container Storage Facilities
- [ ] 4.7 Constructing or Modifying Container Storage Facilities
- [ ] 4.8 Operating Container Storage Facilities

Contaminated Areas – (Radiological, Chemical)
- [X] 4.9 Working in a CERCLA Area or Contamination

Drinking Water
- [ ] 4.10 Constructing or Modifying Drinking Water Systems
- [ ] 4.11 Operating Drinking Water Systems
- [ ] 4.12 Sampling Drinking Water Systems
- [ ] 4.13 Maintaining & Repairing Drinking Water Systems
- [ ] 4.14 Removing a Drinking Water Pump
- [ ] 4.15 Exceeding Permitted or Regulatory Limits-Drinking Water

Facility, Equipment, &/or Process
- [ ] 4.16 Constructing or Modifying Facilities, Equipment, or Processes
- [ ] 4.17 Maintaining & Repairing Facilities, Equipment, or Processes
- [ ] 4.18 Manufacturing Wood Furniture & Wood Furniture Components
- [ ] 4.19 Maintaining Equipment Containing, or Contaminated with PCBs
- [ ] 4.20 Decontaminating Equipment Containing, or Contaminated with PCBs
- [ ] 4.21 Performing Building or Facility Assessment Before Preparing them for Transfer to Surplus or Inactive Facility Status
- [ ] 4.22 Emptying Buildings or Facilities before Transferring Them to Surplus or Inactive Facility Status
- [ ] 4.23 Deactivating, Decontaminating, Dismantling, or Closing Facilities, Equipment & Processes

Facility, Equipment, &/or Processes that Emit Air Pollutants
- [ ] 4.24 Constructing or Modifying Airborne Emission Sources
- [X] 4.25 Operating Facilities & Equipment That Emit Airborne Pollutants
- [X] 4.26 Performing Activities With the Potential for Fugitive Dust or Fugitive Emissions
- [ ] 4.27 Conducting Open Burning
- [ ] 4.28 Burning Fuels
- [ ] 4.29 Exceeding Permitted or Regulatory Limits – Air

Fuels (Petroleum)
- [ ] 4.30 Maintaining & Repairing Motor Vehicle Gasoline Station Pumps

Halon & Appliances Containing Halon
- [ ] 4.31 Maintaining, Testing, & Disposing or Halon-Containing Equipment

Inspections
- [ ] 4.32 Responding to Regulatory Inspections

Laboratory Services
- [X] 4.33 Procuring Laboratory Services For Waste Characterization

Ozone Depleting Substances (ODS), Refrigerants or Appliances Containing Refrigerants
- [ ] 4.34 Purchasing ODS (i.e., Refrigerants, Halon, & Other ODS) Equipment or Recovery/Recycling Equipment
- [ ] 4.35 Training Technicians to Handle Refrigerants
- [ ] 4.36 Maintaining, Servicing, or Repairing Refrigeration & Air Conditioning Equipment
- [ ] 4.37 Recycling Refrigerants from Motor Vehicle Air Conditioners
- [ ] 4.38 Distributing, Excessing, or Disposing or Appliances Containing Refrigerants

Pesticides & Fertilizers
- [ ] 4.39 Procuring, Applying & Storing Pesticides
- [ ] 4.40 Apply Fertilizers

Property
- [ ] 4.41 Leasing, Renting, or Transacting Real Property

Research & Development
- [ ] 4.42 Conducting New or Modifying Existing Research & Development Activities

Routine Activities
- [ ] 4.92 Routine Administrative Activities
- [ ] 4.1 Routine Maintenance Activities

Septic Tanks
- [ ] 4.43 Constructing or Modifying Septic Tanks/System
- [ ] 4.44 Discharging to Septic Tanks/Systems
- [ ] 4.45 Maintaining & Repairing Sept Tanks/Systems
- [ ] 4.46 Pumping Septic Tanks
- [ ] 4.47 Abandoning or Closing Septic Tanks

Soils – Disturbing Soil or Altering Stream Channels
- [X] 4.48 Disturbing Soils or Altering Stream Channels

Spills, Releases, & Fire-Related Incidents
- [ ] 4.49 Reporting & Cleaning Up Spills & Releases (Non-PCB)
- [ ] 4.49 Oil Spills That Cannot be Cleaned Up Within 24 Hrs.
- [ ] 4.50 Reporting PCB Spills & Releases & Fire-Related Incidents Involving PCBs
- [ ] 4.51 Cleaning Up Spills & releases of PCBs
- [ ] 4.52 Leaking Equipment Containing or Contaminated With PCBs

Stormwater – Activities That Impact Storm Waters at the INEEL Site
- [ ] 4.53 Managing Storm Waters at Construction & D&D Sites
- [ ] 4.54 Managing Storm Waters at Industrial Sites

Tanks – Above Ground & Underground Tanks
- [ ] 4.55 Constructing or Modifying Above Ground Storage Tanks
- [ ] 4.56 Operating Above Ground Storage Tanks
- [ ] 4.57 Repairing Above Ground Storage Tanks
- [ ] 4.58 Changing Use or Reactivating Above Ground Storage Tanks
- [ ] 4.59 Discontinuing Use Of, Or Closing, Relocating, Or Removing Above Ground Storage Tanks & Non-Regulated Underground Storage Tanks
- [ ] 4.60 Constructing or Modifying UST Systems
- [ ] 4.61 Operating & Maintaining Underground Storage Tanks (USTs)
- [ ] 4.62 Repairing USTs
- [ ] 4.63 Releases, Leaks, Spills, or Unusual Operating Conditions From USTs
- [ ] 4.64 Changing Use or Reactivating USTs
- [ ] 4.65 Temporarily Discontinuing Use Of, Or Temporarily Closing UST
- [ ] 4.66 Discontinuing Use Of, Or Closing, Relocating, or Removing USTs Permanently
- [ ] 4.67 Operating Volatile Organic Storage Tanks
- [ ] 4.68 Operating Portable Oil Storage Facilities

Waste Facilities
- [ ] 4.69 Operating Solid Waste Management Units

Wastes
- [ ] 4.70 Procuring Off-Site Waste Management & Recycling Services
- [ ] 4.71 Dispositioning Excess Materials
- [X] 4.72 Planning To Generate Wastes
- [X] 4.73 Generating Waste

Waste Water – City Of Idaho falls
- [ ] 4.74 Constructing or Modifying Sewage & Other Wastewater Systems
- [ ] 4.75 Discharging New Wastewaters or Changing Discharges to the City of Idaho Falls Sewer Systems
- [ ] 4.76 Identifying Chemical Streams for Discharge to the City of Idaho Falls Sewer System
- [ ] 4.77 Monitoring Wastewaters to the City of Idaho Falls Sewer System
- [ ] 4.78 Exceeding Wastewater Discharge Limits to the City of Idaho Falls Sewer System

Wastewater – INEEL Site
- [ ] 4.74 Constructing or Modifying Sewage & Other Wastewater Systems
- [ ] 4.79 Discharging New Wastewaters at the INEEL Site
- [ ] 4.80 Discharging Wastewaters at the INEEL Site
- [ ] 4.81 Discharging Wastewaters to Wastewater Land Application Facilities
- [ ] 4.82 Operating Wastewater Land Application Facilities

Water Use & Consumption
- [ ] 4.83 Reporting Water Consumption

Wells – Water Wells, Injection Wells, Well Protection
- [ ] 4.84 Constructing or Modifying Water Wells
- [ ] 4.85 Protecting Wellheads
- [ ] 4.86 Closing & Abandoning Wells
- [ ] 4.87 Constructing or Modifying Injection Wells
- [ ] 4.88 Operating & Sampling Permitted Injection Wells
- [ ] 4.89 Maintaining Permitted Injection Wells
- [ ] 4.90 Discharging to Shallow Injection Wells Not Requiring a Permit
- [ ] 4.91 Abandoning Injection Well

Environmental Checklist Attachments

Section B. Project Description (continued): Attach a complete and concise description of the project or action. Including type of action (e.g., new construction, process modification, maintenance, new activity, research and development, or work for others), purpose and need, pollution prevention and waste minimization measures, projected start and end dates, and approximate cost.

The proposed action would implement selected remedies documented in the Waste Area Group (WAG)-5 Record of Decision (ROD) to mitigate the risk associated with specific sites at the Idaho National Engineering and Environmental Laboratory (INEEL). The proposed activities would be a remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Management of stored and investigation-derived waste and groundwater monitoring are also components of the proposed action. The initial sites to be remediated are designated as Auxiliary Reactor Area (ARA)-01, ARA-12, and ARA-23. Contaminated soil is the only source medium for the individual sites. Institutional controls (i.e., safety signs, barriers, etc.) would also be implemented as a limited action at ARA-02, ARA-03, ARA-06, ARA-16, ARA-24, Ara-25, Power Burst Facility (PBF)-10, PBF-12, PBF-13, PBF-21, PBF-22, and PBF-26.

The remediation of the soil sites would include the following activities:

Soil contaminated with concentrations in excess of the remediation goals would be removed using conventional earth moving equipment (e.g., scrapers and backhoes). Areas that have been excavated to depths greater than 1 ft would be backfilled with uncontaminated soil or sloped to promote drainage. All excavations would be contoured to match the surrounding terrain and vegetation. Contaminated soil would be characteized and sent to the INEEL CERCLA Disposal Facility (ICDF) or another location within the INEEL for permanent disposal. Hazardous and mixed waste would not be generated as a result of remediation efforts.

Project Start Date: 10/01/01. The remediation effort would be completed by FY-06.

Cost Estimate: $10M

Section C. Environmental Aspects (continued): (If you answered Yes to any Section C Items, label with Section C Item Number and explain below)

1. Air Pollutants – Air emissions (fugitive dust and vehicle exhaust) would be generated when using conventional earth-moving equipment (i.e., scrapers and backhoes) to excavate contaminated soils. Excavating and contouring activities at ARA-01, -12, and -23, could generate fugitive dust. Air emissions would be controlled by the use of water sprays or soil fixatives to suppress dust during excavation and removal. Current radiological control practices would be implemented to minimize radiation exposures to the operators. Radiological controls could consist of limiting the amount of time an operator can work in the area, requiring personnel to wear personal protective clothing, and using distance and shielding to reduce radiation exposure. Shipping containers would be positioned near the excavations so that loaders and backhoes can place the contaminated material directly into the specified containers. Mechanisms would be used to prevent accidental release during transit such as tarps that may be unrolled over a truck box and secured. The waste would then be transported to the locations specified in the OU 5-12 ROD. An Air Permitting Applicability Determination (APAD) has been completed and approved (see attachment). All toxic pollutant emissions must be estimated per IDAPA 58.01.01.585-586. Note Section G of the attached APAD.

4. Chemical Use and Storage – Isopropanol may be used for decontamination of the excavation equipment. Prior to purchasing any chemicals for this project, the Material Exchange Program (MEP) would be contacted to determine if the necessary chemicals are already available. Non-hazardous chemical substitutes would be used in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/specifications of the requester. Upon project completion, any unused chemicals would be made available to the MEP.

5. Contaminated Site Disturbance – Project activities would be performed within the boundaries of three specific CERCLA sites (i.e., ARA-01, ARA-12, and ARA-23). In addition, the proposed action also addresses the ARA-02, ARA-03, ARA-06, ARA-16, ARA-24, ARA-25, PBF-10, PBF-12, PBF-13, PBF-21, PBF-22, and PBF-26 sites as described above in the project description. All samples generated from this project would originate from a CERCLA operable unit within Waste Area Group 5, Operable Unit 5-12 and therefore would be considered CERCLA wastes. In addition, any waste associated with the sampling would be CERCLA waste.

6. Cultural/Historical Resource Disturbance – A Cultural Resource Survey has been conducted for these sites. *(Draft Cultural Resource Investigations for Waste Area Group 5 on the Idaho National Engineering and Environmental Laboratory,* INEEL/EXT-2000-006, March 2000). All of the proposed activities have been surveyed for cultural resources. The proposed work should have no effect on significant cultural resources and archaeological clearance is recommended (see attached note, dated 8/17/2000).

10. Hazardous/Radioactive Material or Waste Handling and Transportation – Wastes would be handled and transported as specified in the ROD.

11. Industrial Waste Generation – Waste streams would be evaluated to determine if any of these materials can be recycled or reused. Reusable/launderable personal protective equipment (PPE) would also be used where practicable.

12. Interaction with Wildlife/Habitat – The Environmental Science and Research Foundation (ESRF) has provided guidance for controlling noxious weeds in areas of soil disturbance. The Foundation recommends a weed management plan and a revegation plan be prepared prior to any soil removal activities. The Foundation also recommends the size of the area disturbed be kept to as small as possible and all roads leading into the area be mowed instead of bladed. All sites should be reseeded to native species upon completion of the remedial action (see attachment, dated August 25, 2000).

15. Radioactive Waste Generation – There would be approximately 52,000 cubic yards of contaminated soil and rocks that would need to be remediated at ARA-I, II, and III. This contamination has resulted from the various activities at these three facilities during the 30+ years of operation. Excavated radioactive soils would be characterized and sent to the ICDF or another location within the INEEL for permanent disposal. The excavated areas would be backfilled, contoured to match the surrounding terrain, and vegetated. Some PPE may become contaminated and also require disposal.

Section E. Instructions and Conditions: (Select applicable Work Activity Instructions from MCP-3480 and/or include conditions required before starting project)

Instructions:

4.5 Purchasing Chemicals

Facility Manager:

- Assign chemical custodian(s) at each facility to track the purchase, storage, and disposition of chemicals used at the facility and to maintain Material Safety Data Sheets (MSDSs) for chemicals used at the facility.
- Contact EA to provide training for chemical custodians in the INEEL Chemical Management System (ICMS).

Responsible Manager:

- Before ordering any chemical, obtain and read the information contained in the MSDS and/or contact the appropriate ES&H representative (this is necessary because the MSDS is not always complete) to familiarize yourself with the hazards and the handling and storage requirements.
- If the MSDS is not available, contact the manufacturer or MSDS Systems personnel in Occupational Health to obtain a current MSDS for the specific chemical being requested.
- Determine if the chemical is available through the Material Exchange Program.
- Contact the MEP coordinator for help in determining whether the chemical meets the requester's specifications.

- If the chemical is not available through the MEP, submit the requisition to procurement.

Procurement:
- Submit the chemical requisition to EA for processing and approval.

Chemical Custodian:
- Enter and track, upon receipt of the chemical, all information required by the ICMS according to the instructions in MCP-2873, INEEL Chemical Management System.

NOTE: Any employee entering data into the ICMS must have current ICMS training.

Responsible Manager:
- Make copies of MSDSs available.

4.6 Using and Storing Chemicals

Facility Manager:
- Assign chemical custodian(s) at each facility to track purchase, storage, and disposition of chemicals used at the facility and to maintain Material Safety Data Sheets (MSDSs) for chemicals used at the facility.

Chemical Custodian: Track chemical purchase, use and disposition in the ICMS according to the instructions in MCP-2873, INEEL Chemical Management System

NOTE: Any employee entering data into the ICMS must have current ICMS training.

Responsible Manager:
- If a chemical is transferred from the original labeled container to another container, label the new container with same information contained on the original container and in accordance with hazard communication MCPs.
- Store the chemical according to the provisions of the MSDS and appropriate health & safety MCPs.
- Notify the chemical custodian of any chemicals that are no longer usable or needed for the original activity.

Chemical Custodian:
- Identify and determine with the facility Material Exchange Coordinator if chemicals that are no longer usable or needed for the original activity should be added to the MEP.
- If chemicals no longer usable or needed are not appropriate to list on the MEP, contact Waste Generator Services to dispose of the chemicals.

Responsible Manager:
- Contact Waste Generator Services for instructions for reuse or proper disposal of empty containers.

Chemical Custodian:
- Quarterly review and update, as necessary, the facility chemical inventory information, as requested by the ICMS System Administrator according to the instructions in MCP-2873, INEEL Chemical Management System.
- Obtain responsible manager approval of facility ICMS chemical inventory information.

Responsible Manager:
- Submit a signed letter to EA Air/Water/NEPA Policy & Permitting Manager and the ICMS System Administrator verifying that the facility ICMS chemical inventory information is accurate.
- Review and update, as necessary, the facility information for chemical storage tanks (any storage unit that is >110 gallons in volume) every two years, and submit the data to the INEEL Tank Compliance Program for review and use on the biennial INEEL Tank Inventory update review.

INEEL Tank Compliance Program:

- Update the INEEL Tank Inventory, as necessary.

4.9 Working in a CERCLA Area of Contamination

Responsible Manager:

- If work in an area contaminated with radiological, chemical, or other constituents might disturb the area, or if the area is a CERCLA area of contamination, implement MCP-3448, Reporting or Disturbance of Suspected Inactive Waste Sites.

4.25 Operating Facilities and Equipment That Emit Airborne Pollutants

Responsible Manager:

- Comply with all requirements applicable to air emissions sources identified in the Air Permit Applicability Determination.

Responsible Manager:

- Certify as accurate all air emissions information, including requests and reports that are to be submitted to the state of Idaho according to the instructions in MCP-9109.
- Perform the following for sources that emit radionuclides.
  - Determine the calendar year emissions for each radionuclide emissions from each source (i.e., fugitive emission area).
  - Provide the annual emissions data to EA Air/Water/NEPA Policy & Permitting by February 28 for the previous calendar year.
  - Contact EA Air/Water/NEPA Policy & Permitting Manager for guidance to develop compliance methodologies, as needed.
  - Prepare and submit for approval to EA a Quality Assurance Project Plan (QAPjP) for each radionuclide source that requires continuous monitoring according to the instructions in MCP-561, Quality Program Plan/Quality Assurance Project Plan.
  - Contact EA Air/Water/NEPA Policy & Permitting Manager for guidance.
  - Continuously monitor radionuclide air emissions at all release points that have uncontrolled radionuclide emissions in excess of a dose equivalent of 0.10 mrem/yr to the off-Site public.
  - Monitor all radionuclides that could contribute greater than 10 percent of the uncontrolled effective dose equivalent for the release point.
  - Follow periodic confirmatory measurement schedule provided by EA.
  - Perform periodic confirmatory measurements by continuous monitoring, or a representative annual grab sample, for radionuclide emission points that have a potential to release radionuclides into the air that would cause an effective dose equivalent to or less than 0.10 mrem/yr but greater than 0.01 mrem/yr.

- Review the following information in the previous year's NESHAP Annual Report and provide changes to EA by March 1:

  - a list of the radioactive materials used at the facility
  - a description of the handling and processing that the radioactive materials undergo at the facility
  - a list of the stacks or vents or other points where radioactive materials are released to the atmosphere
  - a description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each control device.

4.26 Performing Activities with the Potential for Fugitive Dust or Fugitive Emissions

Responsible Manager:

- Control fugitive particulate matter from becoming airborne. The following techniques may be used:
  - water or dust suppressant chemicals
  - control equipment (for example, hoods, fans and fabric filters, containment structures)
  - covering truck transporting materials likely to give rise to airborne dust
  - paving roadways where practical.

4.33 Procuring Laboratory Services for Waste Characterization

NOTE: Laboratory services (except treatability studies), as used in this section, do not include research laboratory activities conducted at or in conjunction with universities or research partnering companies internal laboratories.

Responsible Manager:

- Contact Waste Generator Services (WGS) to prepare a sampling analysis plan.
- Identify preferred external laboratory services provider.

Waste Generator Services:

- Contact the Sample Management Office to determine if the preferred laboratory is listed on the company Qualified Supplier List located at http://home/procurement.

Sample Management Office:

- If the laboratory is not on the approved list, contact EA to have a laboratory assessment completed prior to procuring laboratory services.
- Procure services from only a laboratory that is listed on the company Qualified Supplier List located at http://home/procurement.
- Maintain laboratory assessment results according to the instructions in Section 5.

4.48 Disturbing Soils or Altering Stream Channels

Responsible Manager:

- Before performing activities that disturb soil in the following areas, or before procuring goods and services for the activity, complete, submit to EA, and obtain approval of an EC (Form 451.01)
  - in a 100/500 year floodplain
  - outside a fenced facility
  - in an area greater than 50 feet from existing structure
  - in an area subject to the Industrial or Construction Storm Water Plan
  - in a stream channel (that is, soil disturbance below the high water mark of the Big Lost River, Little Lost River, Birch Creek, and all playa's and spreading areas)

  OR
  - if excavating or discharging fill material so EA can determine if the activity is in a wetland
  - Contact EA for assistance in making determinations.

- If the activity is outside a *facility boundary*, contact EA to request a *biological resource clearance*.

NOTE: Biological resource clearances apply only to the INEEL Site. Facilities in Idaho Falls do not have to follow this instruction.

- If disturbing soil inside a CERCLA area of contamination [includes soils inside Idaho Nuclear Technology and Engineering Center (INTEC)], obtain Environmental Restoration approval.
- If disturbing soil at a facility within the Power Burst Facility (PBF), contact the Cultural Resource Management Office (CRMO) to obtain a cultural resource clearance.

Cultural Resource Management Office:
- Prepare a cultural resource clearance and provide a copy to the requester.

Responsible Manager:
- Proceed with the work in accordance with the approved EC, applicable permits, cultural resource clearance, and other approvals.
- Maintain permits, cultural resource clearances and other approvals according to the instructions in Section 5.

4.72 Planning to Generate Waste

Responsible Manager:
- Do not generate waste that does not have a means of disposition that meets all applicable requirements.
- Contact Waste Generation Services to plan waste characterization and disposition activities.

- Integrate pollution prevention and waste minimization into all waste generation and perform the following:
  - Each year, develop and implement the facility specific Pollution Prevention Plan.
  - Each year, determine if the goals of the waste minimization program are being met.
  - Each year, determine if the methods for the waste minimization program are the most practicable for minimizing waste.
  - Document and certify that the goals and methods used for the waste minimization program are being met and are most practicable.

- Conduct Pollution Prevention Opportunity Assessments on waste generating processes to identify waste reduction opportunities.
- Submit pollution prevention accomplishments to the INEEL Pollution Prevention Unit quarterly

- Maintain records documenting goals and waste minimization methods according to the instructions in Section 5.

4.73 Generating Waste

Generator:
- Contact Waste Generator Services upon waste generation.

Waste Generator Services:
- Implement waste management procedures.
- Maintain waste characterization records according to instructions in the appropriate waste management MCP.

Section F. NEPA Level of Documentation and Reference(s):

Summary of the Proposed Action:

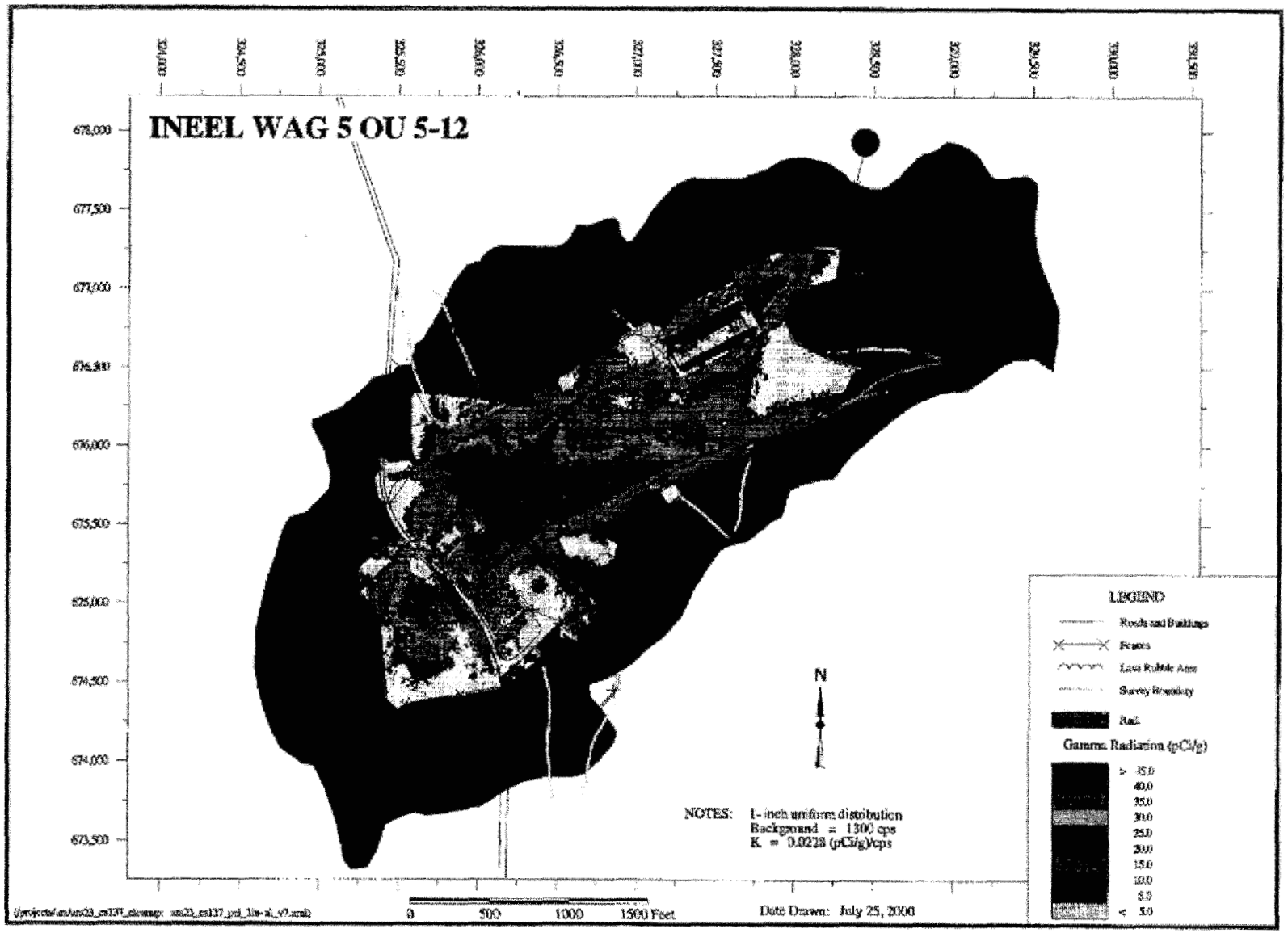
The proposed action would implement selected remedies documented in the WAG-5 ROD to mitigate the risk associated with specific sites at the INEEL. These sites include the Auxiliary Reactor Area (ARA)-01, ARA-12, and ARA-23. Management of stored and investigation-derived waste and groundwater monitoring are also components of the proposed action. Contaminated soil is the only source medium. Soil contaminated with concentrations in excess of the remediation goals would be removed using conventional earth moving equipment. Contaminated soil would be characterized and sent to the INEEL CERCLA Disposal Facility (ICDF) or another location within the INEEL for permanent disposal. Institutional controls would also be implemented as a limited action at ARA-02, ARA-03, ARA-06, ARA-16, ARA-24, ARA-25, Power Burst Facility (PBF)-10, PBF-12, PBF-13, PBF-21, PBF-22, and PBF-26.

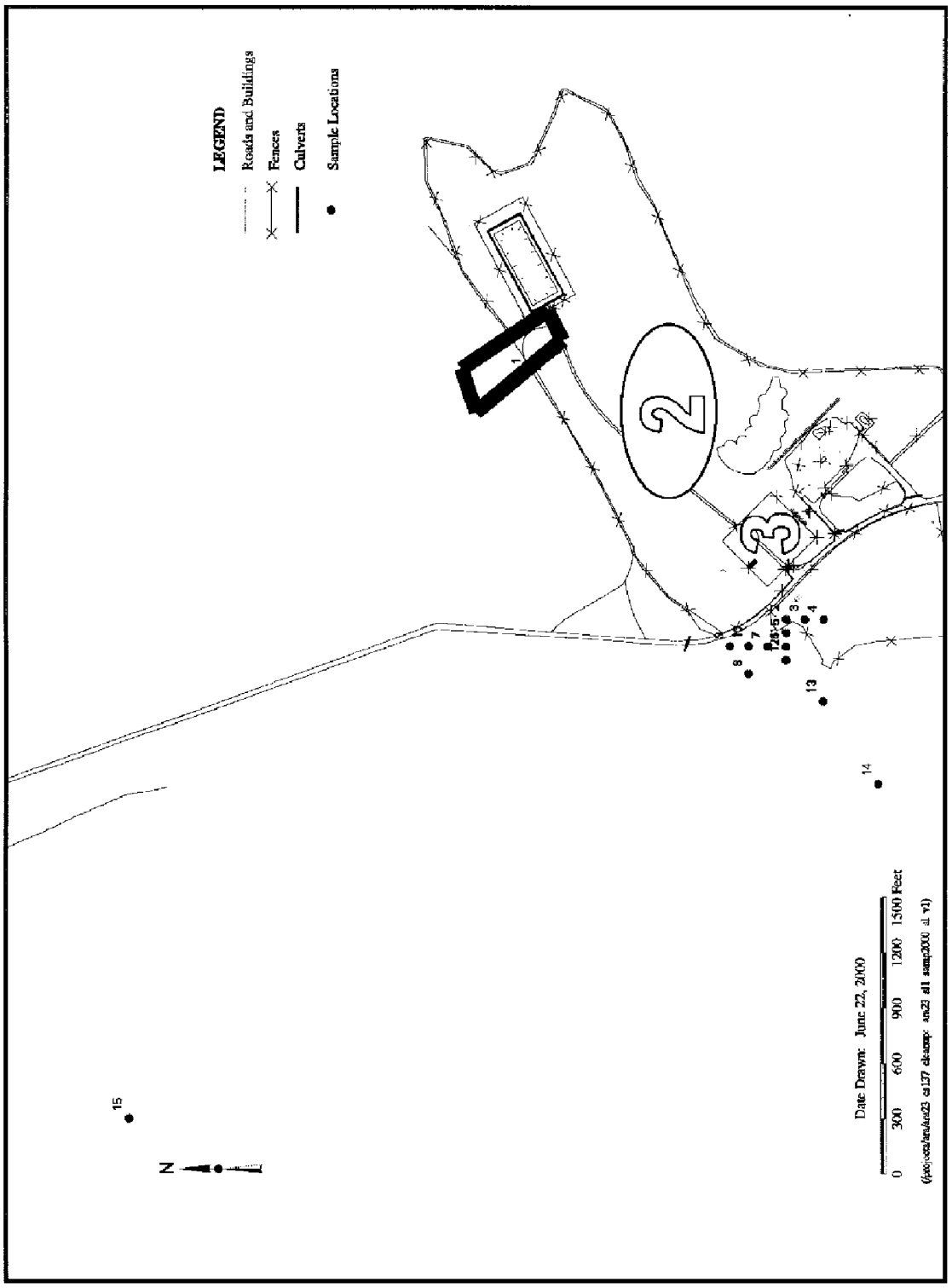
Project activities are expected to begin near October 1, 2001 and continue until FY-06 at an estimated cost of $10,000,000.

Use of the CERCLA Process: In accordance with the June 1994 Secretarial Policy on the National Environmental Policy Act, the Department of Energy will rely on the CERCLA Process for review of actions to be taken under CERCLA. The proposed activity supports a CERCLA action and does not support the siting, construction, or operation of a treatment, storage, or disposal facility for waste management or other purposes unrelated to CERCLA. The CERCLA documents for this activity have incorporated NEPA values to the extent practicable, and the CERCLA documents will be made available to the public in accordance with the requirements of CERCLA.

CERCLA Strategy: In accordance with CERCLA § 113(k)(2)(B)(i-v) and § 117 and the INEEL Community Relations Plan, opportunities for the public to obtain information and participate in the remedial investigation and decision process for WAG 5 were provided from May 1997 through June 1999. The documents providing information and opportunities to provide input included a "kick-off" fact sheet, which briefly discussed the status of the RI/FS; various INEEL Reporter newsletter articles (a publication of the INEEL Environmental Restoration Program); three supplemental updates to the INEEL Reporter, one "update" fact sheet; a Proposed Plan; briefings and presentations to interested groups; interviews; and public meetings.

Several briefings on the WAG 5 investigation were given by DOE-ID to the INEEL Citizens Advisory Board and its Environmental Restoration Program Subcommittee. Briefings were held with members of an Idaho-based environmental organization, an organization consisting largely of retired INEEL employees, the Shoshone-Bannock tribes, several Idaho radio stations, several Idaho newspapers, national publications, and four Idaho television stations. All comments received on the Proposed Plan were considered during the development of the OU 5-12 ROD. The decision for the WAG 5 action was based on the information in the Administrative Record for WAG 5. In compliance with CERCLA, the OU 5-12 that documents the decisions made at WAG 5 has been made available for public review in the DOE WAG 5 Administrative Record.


INEEL WAG 5 OU 5-12
LEGEND
Roads and Buildings
Fences
Lava Rubble Area
Survey Boundary
Rad.
Gamma Radiation (pCi/g)
> 45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
< 5.0
N
NOTES: 1-inch uniform distribution
Background = 1300 cps
K = 0.0228 (pCi/g)/cps
0 500 1000 1500 Feet
Date Drawn: July 25, 2000


LEGEND
Roads and Buildings
Fences
Culverts
Sample Locations
2
3
15
14
13
8
7
4
3
N
Date Drawn: June 22, 2000
0 300 600 900 1200 1500 Feet

AIR PERMITTING APPLICABILITY DETERMINATION (APAD)
ENVIRONMENTAL AFFAIRS

Note: This attachment serves as official transmittal of the Environmental Affairs APAD and is approved based on information and project description supplied for this determination. The undersigned agree that the information in the referenced document is true, accurate, and complete to the best of their knowledge.

Section A. Reviewer, Tracking, and Approval

Project Title: WAG 5 Comprehensive Remedial Action	
Date: August 15, 2000	Project Number:
APAD Tracking Number: 00-60	NEPA Document Number: PBF-00-002
APAD Technical Author: Harrison Orr Telephone: 526-0759	Signature: Date: 8.15.00
APAD Technical Reviewer: Jim Tkachyk Telephone: 526-7965	Signature: Date: 8/15/00
Air/Water Policy and Permitting Supervisor (*not required for transmittal of no permitting required statements*): Telephone:	Signature: Date:
Air/Water/NEPA Policy and Permitting Manager (*not required for transmittal of no permitting required statements):* Telephone:	Signature: Date:
Performing Organization Project Manager (*not required for transmittal of no permitting required statements):* Telephone:	Signature: Date:
Facility Manager (*not required for transmittal of no permitting required statements):* Telephone:	Signature: Date:

Section B. Air Permitting Applicability Determination

- ☐ Permit to Construct (PTC) required (contact DEQ)
- ☐ PTC Modification Required (contact DEQ)
- ☐ Prevention of Significant Deterioration (PSD) Permit
- ☐ Category I Exemption
- ☐ Category II Exemption
- ☐ Director's Exemption
- ☐ Further Evaluation for Permitting Required
- ☐ No Permitting Required, With Conditions
- ☐ No Permitting Required, Without Conditions
- ☒ No Permitting Required, CERCLA Action with Conditions (must meet ARARs)

Section C. Brief Description of Air Pollutant Emitting Aspects of Proposed Activity

Air emissions (fugitive dust and vehicle exhaust) would be generated when using conventional earth-moving equipment (i.e., scrapers and backhoes) to excavate and remove sludge in the seepage pit of ARA-02's sanitary waste system. Excavating and contouring activities at ARA-01, -12, -23, ~~-25, and PBF-16, and removal of the ARA-16 radionuclide tank and associated pipes, would generate additional emissions.~~ Air emissions would be controlled by the use of water sprays or soil fixatives to suppress dust during excavation and removal. Current radiological control practices would be implemented to minimize radiation exposures to the operators. Radiological controls could consist of limiting the amount of time an operator can work in the area, requiring personnel to wear personal protective clothing, and using distance and shielding to reduce radiation exposure. Shipping containers would be positioned near the excavations so that loaders and backhoes can place the contaminated material directly into the specified containers. Mechanisms would be used to prevent accidental release during transit such as tarps that may be unrolled over a truck box and secured. The waste would then be transported to the locations specified in the OU 5-12 ROD.

R.S. Morris 1/25/01

Section D. Impact (check if applicable)

☐ Additional Requirement(s) Attached	☐ Air Operating Permit Certification
☐ APAD Revision Requirement	☒ CERCLA Remedial Action
☐ Change in Stack Parameters	☐ Demolition Notification
☐ Excess Emissions Reporting	☐ Fuel Burning Equipment Particulate Matter
☐ Fuel Sulfur Content	☒ Fugitive Dust Control
☐ Incinerator Control	☐ NESHAP Asbestos Notification
☐ NESHAP Asbestos Notification CERCLA	☐ NESHAP Continuously Monitored Radionuclide
☒ NESHAP Radionuclide Actual Emissions	☐ NESHAP Subcontractor Asbestos Notification
☐ NESHAP Unabated Radionuclide Emissions	☐ Notification of Emissions Change
☐ Open Burning	☐ Particulate Matter Process Weight Limitations
☒ Portable Equipment Registration	☐ Project Status
☐ Reporting	☐ Subcontractor Internal Combustion Engine(s)
☒ Subcontractor Permitting/Registration	☐ Tier I AOP Duration
☐ Tier I AOP Renewal	☒ Visible Emissions

Section E. Summary of Requirements of Operations

***NESHAP Radionuclide Actual Emissions** - All radiological emissions to the environment, including those from all point and diffuse sources, must be determined for demonstrating compliance with the NESHAP Standard [see CFR 61.93 (a)] and submitted for reporting in the INEEL NESHAP's Annual Report per 40 CFR 61.94. If any fugitive radiological emissions are released, the performing organization Project Manager or Source Owner/Manager shall ensure that the calendar year emissions are determined and reported (via signed memorandum) to Jim Tkachyk by February 28 for the preceding year. Contact Jim Tkachyk (BBWI Environmental Affairs, 526-7965) for guidance on determining emissions.*

***Subcontractor Permitting/Registration** - Subcontractors bringing "portable equipment" onto the INEEL are subject to the registration requirements of IDAPA 58.01.01.500, and must provide documentation of permitting and registration as part of the vendor data submittal. "Portable equipment" is defined as equipment which is designed to be dismantled and transported from one job site to another job site (i.e. gravel crushing operations, batch asphalt plants). Permitting and registration documentation must be maintained on-site with the applicable "portable equipment". The performing organization Project Manager shall ensure the Subcontractor submits "portable equipment" registration documentation as part of the vendor data submittal. Contact Rachael Delmore (BBWI Environmental Affairs, 526-5950) for guidance.*

Fugitive Dust Control - Fugitive dust emissions that may be produced during construction, demolition, excavation, and backfilling activities must be controlled in accordance with Idaho Administrative Procedures Act (IDAPA) 58.01.01.650, "Idaho Rules for Control of Fugitive Dust". This requires that all reasonable precautions be taken to prevent the generation of fugitive dust. The performing organization Project Manager shall ensure that fugitive dust emissions for the proposed action are controlled. Some reasonable precautions may include but are not limited to, the use of water or chemicals, the use of control equipment, and the covering of trucks. For additional guidance, contact John Gill (BBWI Environmental Affairs; 526-8406).

Visible Emissions: IDAPA 58.01.01.625 - A person shall not discharge any air pollutant into the atmosphere from any point of emission for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period which is greater than twenty percent (20%) opacity as determined by procedures contained in the Procedures Manual for Air Pollution Control, Section II (Evaluation of Visible Emissions Manual). (5-1-94). If visible emissions are observed from internal combustion equipment used for this project, or visible emissions are observed from other actions related to the project, the performing organization Project Manager shall ensure the visible emissions are in compliance with IDAPA 58.01.01.625. Contact Norm Stanley (BBWI Environmental Affairs, 526-5901) for guidance.

CERCLA Remedial Action - Remedial action must meet the substantive requirements of the Clean Air Act (CAA) which are considered either Applicable or Relevant and Appropriate (ARAR), and may include State of Idaho and Federal requirements. The performing organization Project Manager shall ensure CERCLA project personnel calculate projected emissions from the CERCLA remediation and maintain documentation in the CERCLA project file. Control of pollutant emissions may be negotiated with EPA subject to public review and comment. CERCLA actions involving radionuclide emissions must be reported in the NESHAP annual report.

Portable Equipment Registration - If "portable" or "stationary" equipment having combustion emissions is proposed for procurement, operations personnel must submit a "Request for Air Permitting Applicability Determination" (RAPAD) to BBWI Environmental Affairs. INEEL-owned portable equipment used on the INEEL does not require registration with the State.

Section F. Summary of Air Emissions Environmental Reports Performed by Environmental Affairs

- [ ] Air Emissions Inventory (phase I & II) (John Gill)
- [x] Annual Toxics Report (Ray McDougal)
- [x] NESHAP Annual Report (Jim Tkachyk)
- [ ] PSD Quarterly Report (Scott Lane)
- [ ] Semi-annual Continuous Compliance Report (JimTkachyk)
- [ ] Air Operating Permit (John Gill)
- [ ] Continuous Compliance Monitoring (JimTkachyk)
- [ ] Periodic Confirmatory Monitoring (JimTkachyk)

Section G. Additional Comments or Conditions

Substance	CAS	Actual Emissions (lb/h)	Potential	[illegible]	[illegible]
NON-CARCINOGENIC					
Isopropyl alcohol	67-63-0			65.3	49

Isopropyl alcohol is being proposed as a decontamination medium. If this toxic is used, please note the above constraints for use. Any unabated use is considered fugitive and the entire amount is counted as being released. No more than 65.3 pounds per hour can be used for decontamination without additional air quality modeling.

No other toxic was identified in the EC.

Section H. Summary of Air Operating Permit Requirements

☐ Fuel Burning Equipment Particulate Matter	☐ Fuel Sulfur Content
☐ Incinerator Control	☐ Open Burning
☐ Particulate Matter Process Weight Limitations	☐ Reporting
☐ Tier I AOP Duration	☐ Tier I AOP Renewal
☐ Visible Emissions	

☐ §264	☐ §60, Subpart Dc
☐ §60, Subpart Kb	☐ §60.116b
☐ §60.42c	☐ §60.44c
☐ §60.48c	☐ §61, Subpart H
☐ §61, Subpart M	☐ §61.154
☐ §63.460	☐ §68
☐ §82	

Section I: Air Operating Permit Requirements

Section J: Justification for APAD

Historically, Environmental Affairs have not been involved with the development of ARAR's. No further action is required.

☒ YES	☐ NO

Section K: Specify NEPA Text

Section L: Chemicals IDAPA 16.01.01.585, 586 Toxic Air Pollutants

NON-CARCINOGENIC			
Isopropyl alcohol	67-63-0	65.3	49

Brenda R Pace 08/17/2000 10:15:22 AM

To: Reed S Moser/R2M/CC01/INEEL/US@INEL
cc: Christine Hiaring/HRG/CC01/INEEL/US@INEL
Subject: Re: PBF-00-002 "WAG 5 Comprehensive Remdial Action"

Hi Reed and Chris. thanks for providing additional detail on the activities associated with cleanup within WAG-5. A review of my survey records shows that the proposed work should have no effect on significant cultural resources and archaeological clearance is recommended for all work. As always, however, the INEEL Stop Work Authority must be invoked and the INEEL Cultural Resource Management Office consulted immediately if any cultural materials are unexpectedly encountered. Excavations associated with ARA-23 located outside the northwestern portion of the ARA perimeter fence should be watched with special care as there are known cultural resources in this vicinity. Care must also be taken to avoid any additonal damage to the small lava tube cave located within the fenced ARA perimeter. This site is located in the small fenced area southwest of the main road leading to the facility. Based on the map provided, the cave appears to lie south of the proposed excavation (drawing C-6) and should not be impacted if the work is completed as planned.

Thanks for your continuing efforts to protect cultural resources within WAG-5! Please don't hesitate to call if you have questions or if I can be of additional assistance. --Brenda-

Environmental Science and Research Foundation, Inc.

101 S. Park Ave. Suite 2; P.O. Box 51838 • Idaho Falls, ID 83405 • 208-525-7160 • Fax: 208-525-7036
Email: majorss@esrf.org • Web Page: http://esrf.org

August 30, 2000

Mr. Roger L. Twitchell
NEPA Compliance Officer
U. S. Department of Energy
Idaho Operations Office
850 Energy Drive, MS 1216
Idaho Falls, ID 83401-1563

Subject: WAG 5 Comprehensive Remedial Action (PBF-00-002)

Dear Mr. Twitchell:

This letter provides recommendations in support of NEPA for activities related to the remediation of sites located in the Auxiliary Reactor Area (ARA)-01, ARA-03, ARA-12, ARA-23, ARA-24, ARA-25, and Power Burst Facility (PBF)-10, PBF-13, PBF-21, PBF-22, and PBF-26. Remediation activities fall under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Remediation efforts include management of stored and investigation-derived waste, groundwater sampling, and the removing of soil that has concentrations in excess of the remediation goals.

The proposed remediation areas have been previously disturbed. The soils of these areas are silty-clay. The area is dominated by sagebrush, grey rabbit brush, crested wheatgrass and a variety of native grasses. Plant cover is approximately 20 percent.

The Foundation recommends a weed management plan and a revegetation plan be prepared prior to initiation of any soil removal activities. The Foundation recommends the size of the area disturbed be kept to as small as possible and all roads leading into the area be mowed instead of bladed. All sites should be reseeded to native species upon completion of the remedial actions. The Foundation can assist the project manager with details on reseeding.

Some of the areas proposed for these activities are likely used by a diverse complement of small mammals, reptiles, and breeding bird species common to the sagebrush steppe. Some former Candidate species for listing as Threatened or Endangered (e.g. ferruginous hawk, loggerhead shrike and sagebrush lizard) are known to use these general areas. Big game animals likely using these areas include pronghorn and mule deer.

The areas likely to be affected by these activities have been previously disturbed. It is unlikely the proposed activities will have any measurable impact on species of federal or state concern.

There are no federally listed or proposed threatened or endangered species, species of special concern, or records thereof, or designated critical habitat in proximity to the project area. It is our opinion a biological consultation with the U.S. Fish and Wildlife Service is not necessary for these activities.

If you have any questions regarding this evaluation, please contact me at the letterhead phone number.

Sincerely,

Sue J. Majors

Sue J. Majors
Research Technician

cc: J. S. Irving, Bechtel BWXT, MS 3428
R. S. Moser, Bechtel BWXR, MS 3427
C. M. Hiaring, Bechtel BWXT, MS 3950
Foundation Files